# In the United States Patent and Trademark Office

In re the Application of:

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| William Kress Bodin | ) | |
| Serial Number: 10/046,953 | ) | Group: 2612 |
| Docket Number: AUS920010780US1 | ) | Examiner: Vernal U. Brown |
| Filed on: 01/15/2002 | ) | |
| For: "Free-space Gesture Recognition | ) | |
| for Transaction Security and Command | ) | |
| Processing" | ) | |

## APPEAL BRIEF

***Real Party in Interest per 37 CFR §41.37(c)(1)(i)***

The subject patent application is owned by International Business Machines Corporation of Armonk, NY.

***Related Appeals and Interferences per 37 CFR §41.37(c)(1)(ii)***

None.

***Status of Claims per 37 CFR §41.37(c)(1)(iii)***

Claims 1 - 27 are finally rejected. The rejections of Claims 1 - 27 are appealed.

***Status of Amendments after Final Rejections per 37 CFR §41.37(c)(1)(iv)***

No amendments to the claims have been submitted or entered after final rejections.

***Summary of the Claimed Subject Matter per 37 CFR §41.37(c)(1)(v)***

Appellants' invention provides a sensor panel having a matrix of independently decoded sensors, arranged in a two-dimensional pattern on a panel, which detects the proximity of a gesturing instrument such as a credit card or key fob fitted with a Radio Frequency Identification (RFID) device. Software, firmware, or circuitry of the invention monitors on a timed basis which of the sensors in the panel are receiving the signal from the gesturing device which has entered the proximity of one of the sensors. The user moves the gesturing device in a generally two-dimensional pattern to perform a "signature" in free space near the panel, and as the RFID moves from the proximity of one sensor to another, the control software or circuitry records the sequence of receiving sensors. This sequence, preferably a simple series of sensor numbers or identifiers, can then be quickly and efficiently handled as a number to looked up the identification of the user. This obviates the practical problems which arise with accurately recognizing a handwritten human signature, but provides the RF ID technology with a user-defined "personal identification" step to enhance the security of the device and to thwart use by unauthorized persons in possession of the RF ID unit. In advanced embodiments, the user is allowed to define a plurality of signature gestures, each having the possibility of being associated with a transaction or authorization level. Alternate embodiments of the invention employ other types of gesturing instruments and sensors, such as passive infrared detectors and acoustic detectors. The invention can be used to enable or authorize physical operations, such as the unlocking of a door, enabling dispensation of fuel from a fuel pump, etc.

More specifically, independent claim 1 sets forth a method for detecting a free-space gesture signature conducted with a gesturing instrument by:

(a) providing a panel (para. [0020]; fig. 2 #20) mounted on a controlled system, the panel having a plurality of gesturing sensors in a two-dimensional arrangement (para. [0024]; fig. 2 #23, #24, #26, #27) , each sensor being adapted to detect a gesturing instrument within a proximity of a sensor (para. [0024]; fig. 2 #P1, #P2, #P3, #P4), each sensor having an independent detection event signal (para. [0022]; separate unsummed leads from sensors to CIDU in fig. 2);

(b) determining a sensor sequence (paras. [0023], [0024]; fig. 2 #22; fig. 4 #43) from a series of sensor detection events (para. [0032]; fig. 4 #42) responsive to

movement of a gesturing instrument within the proximity of said plurality of sensors (paras. [0024], [0030]; fig. 2 #22; figs. 3a and 3b);

(c) correlating (paras. [0034], [0035]; fig. 4 #44, #45) said sensor sequence to a predetermined sequence in order to authenticate (para. [0046]; fig. 4 #46) a user of said gesturing instrument; and

(d) responsive to authentication of said user, authorizing a physical security action (paras. [0021], [0029], [0039]; fig. 4 #46).

Independent claim 10 sets forth a computer readable media encoded with software for performing a method according to the invention as follows:

(a) providing a panel (para. [0020]; fig. 2 #20) mounted on a controlled system, the panel having a plurality of gesturing sensors in a two-dimensional arrangement (para. [0024]; fig. 2 #23, #24, #26, #27) , each sensor being adapted to detect a gesturing instrument within a proximity of a sensor (para. [0024]; fig. 2 #P1, #P2, #P3, #P4), each sensor having an independent detection event signal (para. [0022]; separate unsummed leads from sensors to CIDU in fig. 2);

(b) determining a sensor sequence (paras. [0023], [0024]; fig. 2 #22; fig. 4 #43) from a series of sensor detection events (para. [0032]; fig. 4 #42) responsive to movement of a gesturing instrument within the proximity of said plurality of sensors (paras. [0024], [0030]; fig. 2 #22; figs. 3a and 3b);

(c) correlating (paras. [0034], [0035]; fig. 4 #44, #45) said sensor sequence to a predetermined sequence in order to authenticate (para. [0046]; fig. 4 #46) a user of said gesturing instrument; and

(d) responsive to authentication of said user, authorizing a physical security action (paras. [0021], [0029], [0039]; fig. 4 #46).

Independent claim 19 is directed to a system embodiment according to the invention:

(a) a panel (para. [0020]; fig. 2 #20) mounted on a controlled system, the panel having a plurality of gesture sensors organized in a two-dimensional arrangement (para. [0024]; fig. 2 #23, #24, #26, #27), each sensor having an independent detection event signal which is activated upon detection of a gesturing device

within the proximity of a sensor (para. [0024]; fig. 2 #P1, #P2, #P3, #P4);

(b) a gesture recognition processor having a plurality of inputs for said independent detection event signals (para. [0022]; separate unsummed leads from sensors to CIDU in fig. 2), and for performing the steps of:

(1) determining a sensor sequence (paras. [0023], [0024]; fig. 2 #22; fig. 4 #43) from a series of sensor detection events (para. [0032]; fig. 4 #42) responsive to movement of a gesturing instrument within the proximity of said plurality of sensors (paras. [0024], [0030]; fig. 2 #22; figs. 3a and 3b);

(2) correlating (paras. [0034], [0035]; fig. 4 #44, #45) said sensor sequence to a predetermined sequence in order to authenticate (para. [0046]; fig. 4 #46) a user; and

(3) responsive to said authentication of said user, controlling a physical security action (paras. [0021], [0029], [0039]; fig. 4 #46).

***Grounds for Rejection For Which Review is Sought per 37 CFR §41.37(c)(1)(vi)***

Review by the Board is requested of:

(a) the rejections of Claims 1 - 3, 10 - 12, 15, 19 - 21, and 23 - 24 under 35 U.S.C. §103(a) as being unpatentable over U.S. patent 4,988,981 to Zimmerman *et al.* (hereinafter "Zimmerman") in view of US Patent 6,750,848 to Pryor (hereinafter "Pryor") in further view of US published Patent Application 2002/0071277 to Starner *et al.* (hereinafter "Starner");

(b) the rejections of Claims 4 - 7, 13 - 14, 16, 22, and 25 under 35 U.S.C. §103(a) as being unpatentable over Zimmerman in view of Pryor in further view of Starner and in further view of US published patent application 2004/0030601 to Pond *et al.* (hereinafter "Pond");

(c) the rejections of Claims 8, 17, and 26 under 35 U.S.C. §103(a) as being unpatentable over Zimmerman in view of Pryor in further view of Starner and in further view of US patent 6,661,425 to Hiroaki (hereinafter "Hiroaki") and still in further view of US Patent 3,580,058 to Lawrence (hereinafter "Lawrence"); and

(d) the rejections of Claims 9, 18, 27 under 35 U.S.C. §103(a) as being unpatentable over Zimmerman in view of Pryor in further view of Starner and in further view of US patent 6,556,190 to Fleck *et al.* (hereinafter "Fleck").

***Arguments per 37 CFR §41.37(c)(1)(vii)***

Rejections of Claims 1 - 3, 10 - 12, 15, 19 - 21, and 23 - 24 under 35 U.S.C. §103(a) over Zimmerman, Pryor and Starner

In the final Office Action, it was reasoned that Zimmerman teaches all of Appellant's claimed elements, steps, and limitation of independent claims 1, 10 and 19, except using the detection of the signature in front of a panel to authorize a physical security action for the system or device on which or near which the panel is mounted (e.g. a panel on a gas pump, a panel beside or on a locked door, etc.). It was reasoned that Pryor teaches confirming a free-space signature for authorization, and that Starner teaches a remote command for initiating a physical security action, and that one of ordinary skill in the art would have found it obvious to combine Zimmerman, Pryor and Starner in the manner claimed and described by the Appellant.

Because this is a rejection based on a plurality of references, a key question is not just whether the individual elements, steps, or limitations of the Appellant's claims have existed somewhere else in history, but whether or not the combination and sequence of these steps or elements would have been obvious. It would seem to most reasonable people that most inventions are recombinations of old things to one degree or another, unless they involve discovery of a new material, principle, or theory. As such, an applicant's claims are not merely a list of components for a prior art search, but they represent an invention as a whole in which the combination and/or sequence embodies an inventive thought, realization or breakthrough. For these reasons, the courts have stated that claims must be examined as a whole.

Therefore, a central question of patentability to be answered, especially when several or many references are employed, is "Where is the motivation or suggestion to combine so many references in the manner proposed by the examiner?"

In the first Office Action in this application, dated 08/19/2005, the examiner rejected claims 1, 10, and 19 under §103 over Zimmerman, Pryor, and a reference to Kanevsky. In the rationale, the examiner clearly stated that:

> ". . . Zimmerman et al. in view of Pryor . . . is silent on teaching the gesture sequence is used to authorize a physical security action and the physical security action comprises unlocking a door".

So, the examiner initially rejected these dependent claims over Zimmerman, Pryor, and Kanevsky. It was not established by the examiner where in Zimmerman, Pryor, or Kanevsky the suggestion is found to make this combination. Since the examiner stated, without qualification or limitation, that Zimmerman and Pryor were "silent", then it must be presumed that Kanevsky's teaching was relied upon not only for the claimed technical element or step, but also for suggesting such a combination.

However, establishing where this suggestion or motivation is found is a burden of the examiner, not the Appellant. For this reason alone, these rejections are improper and should be reversed.

Further, applicant agreed with the examiner's position of 08/19/2005 that Zimmerman and Pryor are silent as to authorization of a physical security action, including unlocking a door. In response, Applicant pointed out that Kanevsky was not available as prior art because it was commonly assigned with the present patent application. Further, Applicant amended independent claims 1, 10, and 19 to recite "responsive to authentication of said user, authorizing a physical security action".

In the second Office Action dated 02/13/2006, the examiner did not address the arguments made by Applicant regarding where in Zimmerman or Pryor such suggestion to authorize a physical action is found, but simply dismissed the arguments as being moot in view of new grounds of rejection. The "new grounds" however comprised the previous rejections over Zimmerman and Pryor, but with Kanevsky replaced by Starner. On page 3 in the first full paragraph of the second Office Action, the examiner has explained where it is proposed that suggestion to combine Zimmerman with Pryor is found, but again, there is no indication where the examiner believes the suggestion to combine Starner with Zimmerman and Pryor is found.

Should Appellant assume that Zimmerman and Pryor are "silent", and therefore Pryor contains the motivation? This is the burden of the examiner to clearly establish, and cannot be left for presumption. Otherwise, the rejection is improper.

Please note that Starner discloses that requiring a user to be proximal or close to a user interface panel such as a wall panel, as Appellant has claimed, is undesirable. It has been held that if one reference teaches away from combination with another reference, there can be no motivation to combine the references. *In re* Rudko, Civ. App. No. 9801505 (Fed. Cir. May 14, 1999) (unpublished). Therefore, there would be no motivation to combine Starner with any references in which the user is required to be near or proximate to a panel or controlled system. For example, consider these passages from Starner's disclosure (emphasis added by Applicant):

> [0005] An interface designed into a wall panel, the wall panel interface, generally requires a user to approach the location of the wall panel physically. A similar **restriction** occurs with phone interfaces. Furthermore, the phone interface comprise small buttons that render it difficult for a user to read and use the phone interface, **especially a user who is elderly or has disabilities.**
>
> . . .
>
> [0007] Yoshiko Hara, CMOS Sensors Open Industry's Eyes to New Possibilities, EE Times, Jul. 24, 1998, and http://www.Toshiba.com/news/9- 80715.htm, July 1998, illustrates a Toshiba motion processor. Each of the above references is incorporated by reference herein in its entirety. The Toshiba motion processor controls various electrical devices by recognizing gestures that a person makes. The Toshiba motion processor recognizes gestures by using a camera and infrared light-emitting diodes. However, the camera and the infrared light-emitting diodes in the Toshiba motion processor **are in a fixed location, thereby making it inconvenient, especially for an elderly or a disabled user**, to use the Toshiba motion processor. **The inconvenience to the user results from the limitation that the user has to physically be in front the camera and the infrared light-emitting diodes, to input gestures into the system. Even if a user is not elderly or has no disability, it is inconvenient for the user to physically move in front of the camera each time the user wants to control an electrical device, such as, a television or a fan.**
>
> . . .
>
> [0009] Thus, a need exists in the industry to overcome the above-mentioned inadequacies and deficiencies.

To solve these deficiencies in the art, Starner discloses that their gesturing device, image capturing device, and light sources are worn by the user, thereby eliminating the need of the user to approach a wall-mounted panel (emphasis added by Applicant):

> [0024] **The computer 104 preferably is located at the same location as the light-emitting device 102, the image-forming device 103, and the user 106**. For instance, the computer 104 can be located in a **pendant or a pin** that comprises the light-emitting device 102 and the image-forming device 103, and the **pendant or the pin can be placed on the user 106. The pendant can be around the user's 106 neck and the pin can be placed on his/her chest.** Alternatively, the computer 104 can be coupled to the image-forming device 103 via a network such as a public service telephone network, integrated service digital network, or any other wired or wireless network.

If Starner's gesturing device, image capturing device, and light sources were modified to be fixedly mounted on a controlled system or on a wall instead of being worn by the user, Starner's modified system would take on the same undesirable characteristics as described in their background of the art section. Starner, therefore, does not provide motivation to fixedly mount their system as described by Applicant, Zimmerman and Pryor:

> [0059] The image-capturing system 100 of FIGS. 1-4 is easier to use than the known command-and-control interfaces such as the remote control, the portable touch screen, the wall panel interface, and the phone interface since it does not comprise small, cryptic labels and can move with the user 106 as shown in FIGS. 1-2. Although the known command-and-control interfaces generally require dexterity, good eyesight, mobility, and memory, the image-capturing system 100 of FIGS. 1-4 can be used by those who have one or more disabilities.

Therefore, the facts of the situation are:

(a) per the Examiner's own statements, neither Zimmerman or Pryor suggest controlling a physical security action (e.g. unlocking a door); and

(b) Starner does not suggest fixed mounting of the gesture sensor (e.g. Starner

teaches that this type of fixed mounting is undesireable);

(c) therefore there is no motivation or suggestion to combine Zimmerman-Pryor in view of Starner as proposed.

In response to this argument by the Appellant, the examiner has stated that Starner is not relied upon for teaching of the user being proximate to the sensors, but only for its disclosure relevant to opening a door. However, Starner's disclosure must be considered as a whole because one of ordinary skill in the art would be persuaded against such a combination by Starner's own words. The "teaching away" non-obviousness doctrine necessarily requires considering the reference as a whole, otherwise, it would be of no logical value if substantial points in the disclosure could be disregarded.

For all of these reasons, Appellant requests the reversal of the rejections of claims 1 - 3, 10 - 12, 15, 19 - 21, and 23 - 24.

Rejections of Claims 4 - 7, 13 - 14, 16, 22, and 25 under 35 U.S.C. §103(a) over Zimmerman, Pryor, Starner, and Pond

In these rejections, the examiner has stated that the first three references - Zimmerman, Pryor, and Starner - fail to teach certain aspects of these dependent claims, so Pond has been employed to teach these aspects.

Pond is a published patent application which was filed on 08/06/2003, well after Appellant's filing date of 1/15/2002. Pond is a continuation-in-part, not a continuation, of application serial number 09/675,618, to Zalewski, which was filed on 09/29/2000, prior to the filing date of Appellant's application.

Because the Pond published patent application was filed *after* Appellant's patent application, and because Pond is a continuation-*in-part* (not a continuation) of the earlier-filed Zalewski, any disclosure in Pond which is relied upon by the Examiner must be supported by the disclosure in Zalewski.

It is not the burden of the applicant to determine if this support exists, rather it is the burden of the examiner to establish support, else the rejection is improper for failing to establish a *prima facie* case of obviousness. For this reason, the rejection is improper and should be reversed.

Further, it should be noted that Pond and Zalewski only have one inventor in common, Zalewski, and thus it is reasonable to suspect the related disclosures may have considerable differences in their content.

Additionally, the Zalewksi patent does not appear to contain the word "gesture" or "signature", according to a search of the issued text of Zalewski patent 6,771,981, as made available on the USPTO's web site. Therefore, it is reasonable to conclude that any portion of Pond's disclosure with respect to using gestures as signatures does not enjoy priority to the filing date of Zalewski.

For all of these reasons, it is submitted that the rejections of claims 4 - 7, 13 - 14, 16, 22, and 25 are erroneous, and reversal is requested.

Rejections of Claims 8, 17, and 26 under 35 U.S.C. §103(a) over Zimmerman, Pryor, Starner, Hiroaki, and Lawrence

In these rejections, it was reasoned that Zimmerman, Pryor and Starner are silent regarding disclosure of acoustic sensors, but that Hiroaki and Lawrence provide this teaching. However, it was not established in the rationale for these rejections where the missing claimed elements, steps, and limitations as discussed in the foregoing paragraphs are taught by Hiroaki or Lawrence. Because it has not been established that Zimmerman, Pryor, Starner, Hiroaki, and Lawrence teach all of the Appellant's claimed steps, elements, and limitations, these rejections should be reversed.

Further, it should be noted that US Patent number 3,580,058 is issued to Lynnworth, not Lawrence, but the subject matter does regard ultrasonic sensors. Examiner is requested to clarify that US 3,580,058 is the correct patent relied upon for the rejections, or withdraw the rejections.

Rejections of Claims 9, 18, 27 under 35 U.S.C. §103(a) over Zimmerman, Pryor, Starner and Fleck

In these rejections, it was reasoned that Zimmerman, Pryor and Starner are silent regarding disclosure of infrared sensors, but that Fleck provides this teaching. However, it was not established in the rationale for these rejections where the missing claimed elements, steps, and limitations as discussed in the foregoing paragraphs are taught by Fleck. Because it has not been established that Zimmerman, Pryor, Starner, Hiroaki, and Lawrence teach all of the Appellant's claimed steps, elements, and limitations, these rejections should be reversed.

Respectfully Submitted,

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**Claims Appendix**

***per 37 CFR §41.37(c)(1)(viii)***

**Clean Form of Amended Claims**

Claim 1 (previously presented):

A method for detecting a free-space gesture signature conducted with a gesturing instrument, said method comprising the steps of:

providing a panel mounted on a controlled system, the panel having a plurality of gesturing sensors in a two-dimensional arrangement, each sensor being adapted to detect a gesturing instrument within a proximity of a sensor, each sensor having an independent detection event signal;

determining a sensor sequence from a series of sensor detection events responsive to movement of a gesturing instrument within the proximity of said plurality of sensors;

correlating said sensor sequence to a predetermined sequence in order to authenticate a user of said gesturing instrument; and

responsive to authentication of said user, authorizing a physical security action.

Claim 2 (original):

The method as set forth in Claim 1 wherein said step of determining a sensor sequence comprises applying timing analysis to said series of sensor detection events.

Claim 3 (original):

The method as set forth in Claim 1 wherein said step of correlating said sequence to an authorized sequence further comprises authorizing a financial transaction.

Claim 4 (previously presented):

The method as set forth in Claim 1 wherein said step of authorizing a physical security action comprises unlocking a fuel pump.

Claim 5 (previously presented):

The method as set forth in Claim 1 wherein said step of authorizing a physical security action comprises unlocking a door.

Claim 6 (previously presented):

The method as set forth in Claim 1 wherein said step of authorizing a physical security action comprises allowing removal of a physical item from a controlled access area.

Claim 7 (original):

The method as set forth in Claim 1 wherein said step of providing a plurality of gesturing sensors comprises providing an array of Radio Frequency Identification (RFID) sensors adapted to detect movement of RF ID devices.

Claim 8 (original):

The method as set forth in Claim 1 wherein said step of providing a plurality of gesturing sensors comprises providing an array of acoustic sensors adapted to detect movement of acoustic-reflective gesturing instruments.

Claim 9 (original):

The method as set forth in Claim 1 wherein said step of providing a plurality of gesturing sensors comprises providing an array of infrared ("IR") sensors adapted to detect movement of gesturing instruments which are distinguishable by heat.

Claim 10 (previously presented):

A computer readable medium encoded with software for free space gesture signature conducted with a gesturing instrument, said software causing a processor to perform the steps of:

receiving detection event signals from a plurality of gesturing sensors in a two-dimensional arrangement, each sensor being adapted to detect a gesturing instrument within a proximity of a sensor, each sensor having an independent detection event signal output, the sensors being arranged on a panel mounted on a controlled system;

determining a sensor sequence from a series of sensor detection events responsive to movement of a gesturing instrument within the proximity of said plurality of sensors;

correlating said sensor sequence to a predetermined sequence in order to authenticate a user of said gesturing instrument; and

responsive to authentication of said user, authorizing a physical security action.

Claim 11 (original):

The computer readable medium as set forth in Claim 10 wherein said software for receiving detection event signals from a plurality of gesturing sensors comprises software for applying timing analysis to said series of sensor detection events.

Claim 12 (original):

The computer readable medium as set forth in Claim 10 wherein said software for correlating said sequence to an authorized sequence further comprises software for authorizing a financial transaction.

Claim 13 (previously presented):

The computer readable medium as set forth in Claim 10 wherein said software for authorizing a physical security action comprises software for unlocking a fuel pump.

Claim 14 (previously presented):

The computer readable medium as set forth in Claim 10 wherein said software for authorizing a physical security action comprises software for actuating a door lock.

Claim 15 (previously presented):

The computer readable medium as set forth in Claim 10 wherein said software for authorizing a physical security action comprises software for allowing removal of a physical item from a controlled access area.

Claim 16 (original):

The computer readable medium as set forth in Claim 10 wherein said software for receiving detection event signals from a plurality of gesturing sensors comprises software for receiving signals from a plurality of Radio Frequency Identification (RFID) sensors adapted to detect movement of RF ID devices.

Claim 17 (original):

The computer readable medium as set forth in Claim 10 wherein said software for receiving detection event signals from a plurality of gesturing sensors comprises software for receiving signals from a plurality of acoustic sensors adapted to detect movement of acoustic-reflective gesturing instruments.

Claim 18 (original):

The computer readable medium as set forth in Claim 10 wherein said software for receiving detection event signals from a plurality of gesturing sensors comprises software for receiving signals from a plurality of infrared ("IR") sensors adapted to detect movement of gesturing instruments which are distinguishable by heat.

Claim 19 (previously presented):

A system for detecting a command or identifying value made by a user through a gesture signature conducted with a gesturing instrument, said system comprising:

a panel mounted on a controlled system, the panel having a plurality of gesture sensors organized in a two-dimensional arrangement, each sensor having an independent detection event signal which is activated upon detection of a gesturing device within the proximity of a sensor;

a gesture recognition processor having a plurality of inputs for said independent detection event signals, and for performing the steps of:

determining a sensor sequence from a series of sensor detection events responsive to movement of a gesturing instrument within the proximity of said plurality of sensors;

correlating said sensor sequence to a predetermined sequence in order to authenticate a user; and

responsive to said authentication of said user, controlling a physical security action.

Claim 20 (original):

The system as set forth in Claim 19 wherein said processor is adapted to apply timing analysis to said series of sensor detection events.

Claim 21 (original):

The system as set forth in Claim 19 wherein said processor is adapted to perform financial transaction authorizations.

Claim 22 (previously presented):

The system as set forth in Claim 19 wherein said control of a physical security action comprises controlling a fuel pump.

Claim 23 (previously presented):

The system as set forth in Claim 19 wherein said processor is adapted to actuate a door lock.

Claim 24 (previously presented):

The system as set forth in Claim 19 wherein said processor is adapted to allow removal of a physical item from a controlled access area.

Claim 25 (original):

The system as set forth in Claim 19 wherein said plurality of gesture sensors comprises an array of Radio Frequency Identification (RFID) sensors adapted to detect movement of RF ID devices.

Claim 26 (original):

The system as set forth in Claim 19 wherein said plurality of gesture sensors comprises an array of acoustic sensors adapted to detect movement of acoustic-reflective gesturing instruments.

Claim 27 (original):

The system as set forth in Claim 19 wherein said plurality of gesture sensors comprises an array of infrared ("IR") sensors adapted to detect movement of gesturing instruments which are distinguishable by heat.

**Evidence Appendix**

***per 37 CFR §41.37(c)(1)(ix)***

No evidence has been submitted by applicant or examiner pursuant to 37 CFR §§1.130, 1.131, or 1.132.

**Related Proceedings Appendix**

***per 37 CFR §41.37(c)(1)(x)***

No decisions have been rendered by a court or the Board in the related proceedings as identified under 37 CFR §41.37(c)(1)(ii).